

AMENDMENTS TO THE CLAIMS

1. - 149. (Canceled)

150. (Withdrawn) A organism, preferably a mammal organism, comprising an adenovirus according to claim 89, a nucleic acid according to claim 142, a replication system according to claim 144, a vector according to claim 146, or a cell according to claim 149, whereby the organism is selected from the group comprising mice, rats, guinea pigs, pigs, sheep, goats, cattle, horses, dogs and cats.

151. (Withdrawn) Use of an adenovirus according to claim 89, a nucleic acid according to claim 142, a replication system according to claim 144, a vector according to claim 146, or a cell according to claim 149, for replication of an adenovirus, preferably for in vitro replication of an adenovirus.

152. (Withdrawn) Use of an adenovirus according to claim 89, a nucleic acid according to claim 142, a replication system according to claim 144, a vector according to claim 146, or a cell according to claim 149, for the manufacture of an adenovirus, preferably for in vitro manufacture of an adenovirus.

153. (Withdrawn) Use of an adenovirus according to claim 89, a nucleic acid according to claim 142, a replication system according to claim 144, a vector according to claim 146, or a cell according to any of claim 149, for the expression of genes, preferably of genes which promote cell lysis, preferably cell lysis during adenoviral replication, and/or are promoting adenoviral mediated cell lysis.

154. (Withdrawn) Use of an adenovirus according to claim 89, a nucleic acid according to claim 142, a replication system according to claim 144, a vector according to claim 146, or a cell according to claim 149, for the manufacture of a medicament.

155. (Withdrawn) Use according to any of claims 151, 152, 153, or 154, characterised in that the cell in which the adenovirus replicates, has YB-1 in its nucleus, preferably has YB-1 in its nucleus independent of the cell cycle.

156. (Withdrawn) Use according to claims 151,152,153 or 154, characterised in that the cell in which the adenovirus replicates, comprises deregulated YB-1.

157. (Withdrawn) Use according to claim 154, characterised in that the medicament is for the treatment of tumor diseases.

158. (Withdrawn) Use according to claim 157, characterised in that the tumor disease is selected from the group comprising malignant diseases, cancer, cancer diseases and tumors.

159. (Withdrawn) Use according to claim 158, characterised in that the tumors are selected from the group comprising solid non-solid, malignant and benign tumors.

160. (Withdrawn) Use according to claim 157, characterised in that at least a part of the tumor forming cells have YB-1 in the nucleus, preferably have YB-1 in the nucleus independent of the cell cycle.

161. (Withdrawn) Use according to claim 157, characterised in that at least a part of the cells forming the tumor comprises deregulated YB-1.

162. (Withdrawn) Use according to claim 157, characterised in that at least a part of the cells forming the tumor are Rb positive or Rb negative.

163. (Withdrawn) Use according to claim 157, characterised in that at least a part of the cells forming the tumor have a resistance, preferably a multiple resistance against pharmaceutically active agents.

164. (Withdrawn) Use according to claim 163, characterised in that the resistance is a multiple resistance.

165. (Withdrawn) Use according to claim 163, characterised in that the resistance is against antitumor agents, preferably cytostatics, and/or that the resistance is caused by irradiation.

166. (Withdrawn) Use according to claim 157, characterised in that the patient for which the medicament is intended, comprises a plurality of cells, whereby the cells are cells as described in claims 162, 163, or 164.

167. (Withdrawn) Use according to claim 157, characterised in that the medicament comprises at least one further pharmaceutically active agent.

168. (Withdrawn) Use according to claim 157, characterised in that the medicament is administered together with a further pharmaceutically active agent or is intended therefor.

169. (Withdrawn) Use according to claims 167 or 168, characterised in that the further pharmaceutically active agent is selected from the group comprising cytokines, metalloproteinase inhibitors, angiogenesis inhibitors, cytostatics, tyrosine kinase inhibitors and cell cycle inhibitors.

170. (Withdrawn) Use according to claim 157, characterised in that the medicament is administered prior, during or after irradiation.

171. (Withdrawn) Use according to claim 170, characterised in that the irradiation is administered for the purpose of treating a tumor.

172. (Withdrawn) Use according to claim 157, characterised in that the cell or the organism to be treated is subject to a measure, whereby the measure is selected from the group comprising irradiation, administration of cytostatics and hyperthermia.

173. (Withdrawn) Use according to claim 172, characterised in that the measure is applied locally or systemically.

174. (Withdrawn) Use according to claim 170, characterised in that the irradiation uses high-energy radiation, preferably uses any irradiation as used in the treatment of tumor diseases.

175. (Withdrawn) Use of an adenovirus according to claim 89, a nucleic acid according to claim 142, a replication system according to claim 144, a vector according to claim 146, or a cell according to claim 149, or the manufacture of a medicament for the treatment of tumor diseases, characterised in that the tumor disease is selected from the group comprising breast tumors, bone tumors, gastric tumors, intestinal tumors, gall-bladder tumors, pancreas tumors, liver tumors, kidney tumors, brain tumors, ovarian tumors, skin tumors, tumors of cutaneous appendages, head and neck cancer, uterine tumors, synovial tumors, laryngeal tumors, oesophageal tumors, lingual tumors, prostate tumors, preferably one of the preceding tumor diseases having the characteristics as described in claims 160 or 161.

176. (Withdrawn) Use of an adenovirus according to claim 89, a nucleic acid according to claim 142, a replication system according to claim 144, a vector according to claim 146, or a cell according to claim 149, for the manufacture of medicament for the treatment of tumor diseases, whereby the tumor-specific promoter is a promoter which is specific for the tumor for which the medicament is used.

177. (Withdrawn) Pharmaceutical composition comprising an adenovirus according to claim 89, a nucleic acid according to claim 142, a replication system according to claim 144, a vector according to claim 146 or a cell according to claim 149, and optionally a pharmaceutically acceptable carrier.

178. (Cancelled)

179. (Previously Presented) A recombinant adenovirus, wherein upon infection of an eukaryotic cell, the adenovirus expresses a first polypeptide comprising an E1B polypeptide, an E4 polypeptide or an E1B and E4 polypeptide prior to expressing a second polypeptide comprising an E1A polypeptide.

180. (Previously Presented) The recombinant adenovirus of claim 179, wherein the E1B polypeptide is E1B 55 Kd polypeptide.

181. (Previously Presented) The recombinant adenovirus of claim 179, wherein the E4 polypeptide is E4orf6 polypeptide.

182. (Previously Presented) The recombinant adenovirus of claim 179, wherein the E1A polypeptide is E1A12S polypeptide.

183. (Previously Presented) The recombinant adenovirus of claim 179, wherein the first polypeptide comprises E1B and E4.

184. (Previously Presented) The recombinant adenovirus of claim 179, wherein the first polypeptide is encoded by a first polynucleotide and the second polypeptide is encoded by a second polynucleotide, and wherein at least one of the first or second polynucleotide is operably linked to a YB-1-controlled promoter.

185. (Previously Presented) The recombinant adenovirus of claim 179, wherein the second polypeptide is encoded by a second polynucleotide, and wherein the second polynucleotide is operably linked to an E2 late promoter.

186. (Previously Presented) The recombinant adenovirus of claim 179, further comprising a polynucleotide encoding a third polypeptide comprising YB-1 polypeptide that is not E1A.

187. (Previously Presented) The recombinant adenovirus of claim 179, wherein the first and second polypeptides are expressed from a polynucleotide comprising an expression cassette.

188. (Previously Presented) The recombinant adenovirus of claim 187, wherein the first polypeptide is an E1B polypeptide, and a promoter operably linked to a polynucleotide encoding the first polypeptides is not an E1B promoter.

189. (Previously Presented) The recombinant adenovirus of claim 187, wherein the first polypeptide is an E4 polypeptide, and a promoter operably linked to a polynucleotide encoding the first polypeptides is not an E4 promoter.

190. (Previously Presented) The recombinant adenovirus of claim 187, wherein the first polypeptide is an E4 polypeptide, and a promoter operably linked to a polynucleotide encoding the first polypeptide comprises an E1A promoter.

191. (Previously Presented) The recombinant adenovirus of claim 187, wherein the second polypeptide is an E1A polypeptide, and a promoter operably linked to a polynucleotide encoding the second polypeptide is not an E1A promoter.

192. (Previously Presented) The recombinant adenovirus of claim 187, wherein the polynucleotide further encodes a third polypeptide comprising a YB-1 polypeptide.

193. (Previously Presented) The recombinant adenovirus of claim 192, wherein the polynucleotide encoding the third polypeptide is operably linked to a promoter comprising an E2 late promoter.

194. (Previously Presented) The recombinant adenovirus of claim 187, wherein the polynucleotide further comprises an IRES sequence, wherein the IRES sequence separates the nucleic acid sequences encoding the first and second polypeptides.

195. (Currently Amended) The recombinant adenovirus of claim 179, wherein the adenovirus is ~~replication deficient~~ replication deficient in non-tumor cells.

196. (Previously Presented) The recombinant adenovirus of claim 179, wherein the adenovirus is capable of replicating in cells comprising deregulated YB-1 or having YB-1 in a nucleus.